

ABSTRACT

This invention provides methods, devices and device components for sensing, imaging and characterizing changes in the composition of a probe region. More particularly, 5 the present invention provides methods and devices for detecting changes in the refractive index of a probe region positioned adjacent to a sensing surface, preferably a sensing surface comprising a thin conducting film supporting surface plasmon formation. In addition, the present invention provides methods and device for generating surface plasmons in a probe region and characterizing the composition of the probe region by generating one or more 10 surface plasmon resonances curves and/or surface plasmon resonance images of the probe region.